

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Available Plastics Inc

Alabama Technology Network

Lean Manufacturing helps Available Plastics Decrease Throughput Time

Client Profile:

Available Plastics, founded in 1977, is a leading manufacturer in the PVC Industry. Located in Huntsville, Alabama, Available Plastics operations include plastic extrusions and injection molding in a variety of colors for custom orders. They manufacture sports equipment such as soccer goals and storage racks, as well as pool and spa products and central vacuum tubing.

Situation:

Available Plastics wanted to improve throughput time of a new product line with great potential for growth. The area of focus was final fabrication and assembly. In this area, extruded parts were drilled, components inserted, components assembled and packaged for shipping. The area was running with two operators and producing 12 units per hour. Planned demand required the area produce 20 units per hour. Available Plastics contacted the Alabama Technology Network (ATN), a NIST MEP network affiliate, to assist with the improvement of throughput without adding cost.

Solution:

On the first day of a three-day kaizen event, the Alabama Technology Network at the University of Alabama in Huntsville provided Tube Factory training to 12 employees. The Tube Factory simulation introduced the team to Lean Manufacturing principles and how to identify and eliminate waste, or non-value added activities. ATN worked with Available Plastics participants to observe the current process, list wastes and set goals. On the second and third days, the team redesigned the cell, implemented changes and measured the improvement.

Results:

- *Increased throughput 58 percent to 19 units per hour.
- *Reduced operator steps from 56 to 24.
- *Decreased production time.
- *Reduced amount of inventory in cell by 85 percent.
- *Reduced required floor space by 60 percent.

Testimonial:

"We are always amazed at the results we are able to achieve with the help of the ATN group. They use very logical steps to simplify processes and identify waste."

Wayne Bent , Vice President of Operations